Data Science Seminar Series

Monday, September 25, 9:30-10:30 am, OM1241

TITLE

Deep Neural Networks for the Next Generation Wireless Communication Systems

SPEAKER

Dr. Muhammad Hanif

ABSTRACT

In this talk, we will discuss the resource allocation for the next generation wireless networks. We will focus on the problems faced in solving the resource allocation optimization problem in real time within channel coherence interval. We will also explore how data-driven techniques based on neural-networks can be helpful in finding a high-quality solution. We will also discuss the challenges associated with deep-neural networks, and strategies to overcome some of those challenges in this talk.

BIOGRAPHY

Dr. Muhammad Hanif received the Ph.D. degree in electrical engineering from the University of Victoria, Victoria, BC, Canada in 2016. He was a Postdoctoral Fellow with the University of Alberta, Edmonton, AB, Canada, from 2016 to 2018, and with the University of Saskatchewan, Saskatoon, SK, Canada, from 2018 to 2019. He is currently an Assistant Professor with Thompson Rivers University, Kamloops, BC, Canada. His research interests are in the general area of signal processing and wireless communication systems, including cognitive radio networks, massive MIMO systems, polar codes, machine-to-machine communications, reconfigurable-intelligent-surface-based wireless systems, molecular communications, and machine-learning for future wireless networks.

https://www.tru.ca/science/masters-degrees/mscds/Data_Science_Seminar_Series.html